# Contents of Vol. 32

*Vol. 32, No. 1*

Stratified flows of Newtonian and viscoelastic fluids
J. Dheur and M.J. Crochet (Louvain-la-Neuve, Belgium) ..... 1

Non-Newtonian flow modelling in the screw regions of an intermeshing corotating twin screw extruder
Yeh Wang (Taichung, Taiwan) and J.L. White (Akron, OH, U.S.A.) ..... 19

LDV measurements of viscoelastic flow transitions in abrupt axisymmetric contractions: Interaction of inertia and elasticity
W.P. Raiford, L.M. Quinzani, P.J. Coates, R.C. Armstrong and R.A. Brown (Cambridge, MA, U.S.A.) ..... 39

On Rankine–Hugoniot conditions for Maxwell liquids
M. Renardy (Blacksburg, VA, U.S.A.) ..... 69

Draining thin films—Part 2. Laser measurements of film thickness and velocity profile
A.M. Keeley (Ormskirk, U.K.), N.D. Waters (Liverpool, U.K.), P.M. Cummins, G. Rennie and E.J. Staples (Unilever, Wirral, U.K.) ..... 79

*Short communications*

Further remarks on the lip-vortex mechanism of vortex enchancement in planar-contraction flows
R.E. Evans and K. Walters (Aberystwyth, Wales) ..... 95

Remarks on intertial radii, persistent normal stresses, secondary motions, and non-elastic extensional viscosities
D.D. Joseph (Minneapolis, MN, U.S.A.) ..... 107

Calendar ..... 115

*Vol. 32, No. 2*

The determination of polymer relaxation moduli and memory functions using integral transforms
V.M. Kamath and M.R. Mackley (Cambridge, United Kingdom) ..... 119

Stability of shear flows of viscoelastic fluids under perturbations perpendicular to the plane of flow
M. Renardy and Y. Renardy (Blacksburg, VA, U.S.A.) ..... 145

Analysis of plane extrudate-swell of highly elastic liquids with molecular constitutive equations
R.D. Wesson, T.C. Papanastasiou and J.O. Wilkes (Ann Arbor, MI, U.S.A.) ..... 157

Numerical solution of the laminar boundary layer equations for power-law fluids
H.I. Andersson and T.H. Toften (Trondheim, Norway) ..... 175

A purely hyperbolic model for unsteady viscoelastic flow
F.R. Phelan, Jr., M.F. Malone and H.H. Winter (Amherst, MA, U.S.A.) ..... 197

Calendar ..... 225

*Vol. 32, No. 3*

Co-current axisymmetric flow in complex geometries: Experiments
R. van de Griend and M.M. Denn (Berkeley, CA, U.S.A.) ..... 229

Co-current axisymmetric flow in complex geometries: Numerical simulation
S. Musarra (Berkeley, CA, U.S.A.) and R. Keunings (Louvain-la-Neuve, Belgium) ..... 253

Development of the velocity field in transient shear flows of viscoelastic fluids
S.R. Burdette (Cambridge, MA, U.S.A.) ..... 269

A new approach for the FEM simulation of viscoelastic flows
M. Fortin (Quebec, Canada) and A. Fortin (Montreal, Canada) ..... 295

Turbulent jets of dilute polymer solutions
K. Koziol and P. Glowacki (Poznan, Poland) ..... 311

Corrigendum ..... 329
Book review ..... 331
Calendar ..... 335
Author index Vol. 32 ..... 339
Contents Vol. 32 ..... 340